Quest Journal of Management and Social Sciences
Volume 8 Issue 1: 110-128
ISSN Print: 2705-4527
ISSN Online: 2705-4535
Web: https://www.quest.edu.np

Consumer Brand Engagement, Co-Creation and Loyalty Through Social Media Interactivity Among Digital Wallet Service Users of Kathmandu Valley

Prarthana Sen[1] *& Purnima Lawaju*[2*]

[1]Quest International College, Pokhara University, Gwarko, Lalitpur, Nepal
[2]Quest Research Management Cell, Quest International College, Pokhara University, Gwarko, Lalipur
*Corresponding Author: purnimalawaju11@gmail.com

Received: 12 January 2026
Revised: 17 February 2026
Accepted: 27 February 2026
Published: 30 March 2026

How to cite this paper:
Sen, P., & Lawaju, P. (2026). Consumer Brand Engagement, Co-Creation and Loyalty Through Social Media Interactivity Among Digital Wallet Service Users of Kathmandu Valley. *Quest Journal of Management and Social Sciences, 8(1),* 110-128. https://doi.org/10.3126/qjmss.v8i1.91852

Abstract

Background: Digital wallets are rapidly growing in Nepal, offering convenience and cashless payments. Social media provides brands opportunities to engage consumers, share content, and encourage participation. However, research is limited on how social media interactivity influences engagement, value co-creation, and loyalty in developing markets, highlighting a need to explore these dynamics in Kathmandu Valley.

Purpose: This study examines how social media brand interactivity affects consumer brand engagement, value co-creation, and brand loyalty among users of digital wallet services in Kathmandu Valley, Nepal.

Design/methodology/approach: An explanatory research design based on Service-Dominant Logic was used. A total of 403 respondents were surveyed through a non-probability sampling technique, and partial least squares structural equation modeling (PLS-SEM) was employed to analyze the data.

Findings: Cognitive information transfer, entertainment, interactive ease of use, and up-to-date content significantly enhance consumer brand engagement, while customization is non-significant. The model explains 23.4% engagement, 18% value co-creation, and 17% brand loyalty.

Conclusion: Digital wallet service providers should enhance social media interactivity by focusing on cognitive information transfer, up-to-date content, interactive ease of use, and entertainment. Encouraging customer feedback, opinions, and referrals helps co-create value and strengthen brand loyalty. These findings provide practical guidance for improving social media strategies to engage and retain consumers in developing markets such as Nepal.

Keywords: Brand interactivity, engagement, Co-creation, social media, digital wallets, Kathmandu Valley

1. Introduction

The rapid development of digital technologies and the increasing use of the internet have significantly transformed the way businesses communicate with consumers. In the modern digital age, social media has emerged as one of the most important tools for organizational communication, marketing, and customer relationship management (Vinerean, 2017; More, 2023). Social media platforms allow individuals to connect, exchange information, and remain informed about products, services, and global trends (Aral et al., 2013; More, 2023). As a result, businesses and organizations, regardless of their size or industry, increasingly rely on social media to promote their products and services while engaging directly with consumers (Kallee, 2022; Lim & Rasul, 2022). The integration of social media into everyday life has changed how individuals communicate, access information, and interact with businesses (Cao et al., 2021; Dubbelink et al., 2022). Within this digital environment, consumer brand engagement (CBE) has gained considerable attention in marketing research. Consumer brand engagement refers to the level of cognitive, emotional, and behavioral involvement that consumers demonstrate toward a brand (Hollebeek et al., 2014). Activities such as following a brand on social media, interacting with brand content, sharing experiences, participating in promotional campaigns, and providing feedback are all considered forms of consumer brand engagement (Cheung et al., 2020; Cheung et al., 2021). In contemporary marketing practices, CBE has become an important concept because it contributes to building strong customer relationships, increasing repurchase intentions, and enhancing overall brand equity (Algharabat et al., 2020; Cheung et al., 2020; Dubbelink et al., 2022).

Another important development in marketing is the shift from transactional marketing toward relationship-based marketing. Since the late 1990s, organizations have increasingly focused on building long-term relationships with customers rather than emphasizing single transactions (Duncan & Moriarty, 1998; Machado et. al., 2019). Businesses aim to develop sustainable relationships with consumers to create value and strengthen brand loyalty (Gomez et al., 2019). In this regard, consumer brand engagement has become an essential strategy for maintaining strong customer relationships and achieving competitive advantage in the market (Algharabat et al., 2020). Social media platforms play a crucial role in supporting such relationships because they provide interactive features that allow businesses and consumers to communicate and exchange information in real time. Social media interactivity refers to the ability of users to engage with brands and other users through features such as liking, commenting, sharing, and messaging (Khan, 2017; Shawky et al., 2019). These interactive features enable consumers to participate in discussions, create online communities, and share their opinions and experiences with brands (Algharabat et al., 2020; Dubbelink et al., 2022). Through such interactions, consumers may move beyond passive consumption and actively participate in value co-creation processes. Value co-creation occurs when consumers collaborate with firms to contribute ideas, feedback, and experiences that help improve products and services (Banyte & Dovaliene, 2014). Consequently, social media interactivity not only strengthens engagement but also facilitates the development of brand loyalty and long-term customer relationships (Cheung et al., 2020; Chen, 2017).

In Nepal, the use of social media for marketing and communication has been growing rapidly in recent years as more businesses recognize its potential to connect with target audiences (Kaul et al., 2015). Social media platforms are widely used by organizations to promote their products, interact with customers, and receive feedback. According to Datareportal (2022), Nepal had approximately 13.70 million social media users in 2022, representing a significant portion of the population. Platforms such as Facebook, Instagram, and YouTube have become popular channels for business communication and digital marketing activities (Devkota et. al., 2021a). At the same time, the adoption of digital financial technologies, particularly digital wallet services, has increased significantly in Nepal. Digital wallets enable consumers to conduct electronic transactions such as online purchases, bill payments, and money transfers through smartphones or computers (Alam et al., 2021). The increasing popularity of digital wallets has created new opportunities

for service providers to utilize social media platforms to promote their services, communicate with users, and build stronger relationships with customers (Devkota et. al., 2021b). However, despite the growing importance of social media in business communication, organizations often face challenges in creating meaningful engagement and building customer loyalty through these platforms. The intense competition among brands and the overwhelming amount of digital content make it difficult for companies to capture consumer attention and maintain long-term engagement (Furr et al., 2022).

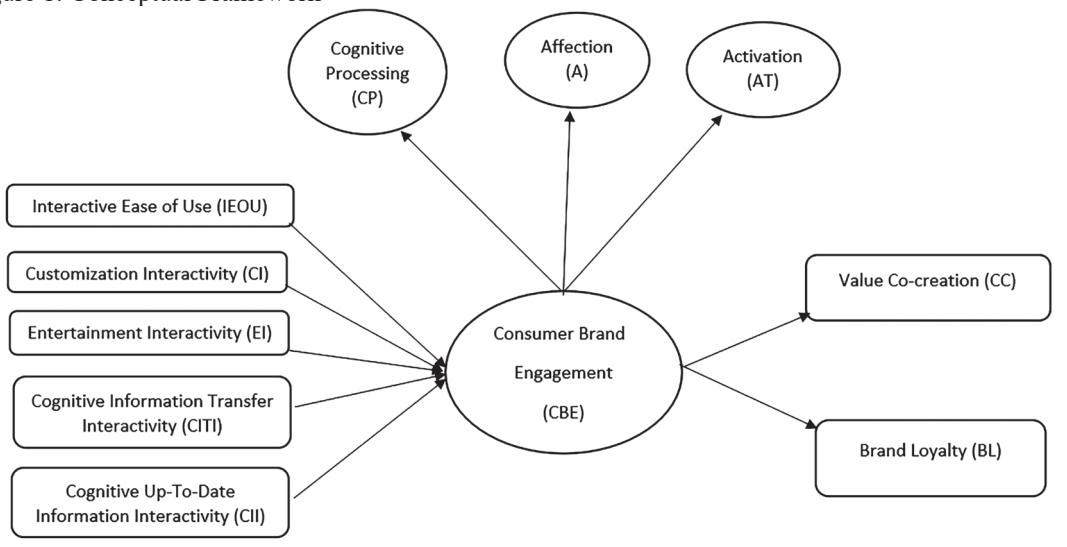
Although previous studies have examined consumer brand engagement and social media marketing in different contexts, limited research has been conducted in emerging economies such as Nepal. Existing studies highlight that consumer brand engagement and value co-creation are still developing concepts that require further empirical investigation to understand their antecedents and outcomes (Devkota et. al., 2021a; 2021b). In Nepal, social media usage has expanded rapidly, with approximately 44.2 percent of the population actively using social media platforms (Datareportal, 2022). Despite this growth, there is a lack of empirical research examining how social media interactivity influences consumer brand engagement, value co-creation, and brand loyalty among digital service users. This gap is particularly significant in the context of digital wallet services, which have experienced rapid growth in recent years. According to Nepal Rastra Bank, more than 7.8 million people in Nepal use digital wallet services for financial transactions (NRB, 2021). Digital wallet service providers frequently use social media platforms to promote their applications, share updates, and interact with customers. However, the effectiveness of these social media interactions in creating consumer engagement and fostering loyalty remains largely unexplored in the Nepalese context. Therefore, this study aims to examine the impact of social media interactivity on consumer brand engagement and its subsequent influence on value co-creation and brand loyalty among digital wallet service users in Kathmandu Valley. Specifically, the study seeks to analyze the effect of social media interactivity on consumer brand engagement, examine the relationship between engagement, value co-creation, and brand loyalty, and identify managerial strategies that can help digital wallet service providers enhance consumer engagement and build long-term customer relationships.

2. Theoretical Framework and Hypothesis

A theoretical framework is a structure of concepts and theories guiding research relationships. It provides the conceptual foundation for explaining relationships among variables and supports the development of research hypotheses (Devkota et. al., 2021b). In this study, the reviewed theories include Uses and Gratification (U&G) Theory, Self-Congruity Theory (SCT), Stimulus–Organism–Response (S-O-R) Theory, Social Exchange Theory (SET), and Service-Dominant Logic (SDL) Theory. These theories provide different perspectives for understanding how consumers interact with brands in digital environments and how such interactions influence engagement and behavioral outcomes.

Among these theories, Service-Dominant Logic (SDL) Theory has been selected as the primary theoretical foundation for this study. SDL theory explains how value is created through interactions and collaborative relationships between firms and consumers (Lusch & Vargo, 2006). The theory emphasizes that service, rather than tangible products, is the fundamental basis of exchange, and value is co-created through active participation between organizations and customers (Wilden et. al., 2017). This perspective aligns closely with the nature of social media platforms, where consumers interact with brands, share feedback, and participate in brand-related discussions. SDL theory is particularly relevant for examining consumer brand engagement because it highlights the importance of interaction, participation, and collaboration in value creation processes (Cheung et al., 2021). Since digital wallet services rely heavily on online communication and social media interactions to engage users, SDL theory provides a suitable conceptual foundation for understanding how social media interactivity influences consumer engagement, value co-creation, and ultimately brand loyalty in the digital service environment. Figure 1 shows the relationship between variables.

Figure 1: Conceptual Framework



Adopted and modified from: Cheung et al. (2020)

Interactivity Ease of Use (IEOU) and Consumer Brand Engagement

Interactive Ease of Use (IEOU) refers to the degree to which users perceive social media platforms and brand interactions as effortless and simple to navigate (Li et al., 2020). When users find social media features easy to access and operate, they are more likely to interact with brand content, participate in discussions, and share information. Studies show that easier interfaces enhance cognitive understanding and emotional attachment to brands, which strengthens consumer engagement (Ashley & Tuten, 2015; Zhang et al., 2021). Higher IEOU motivates users to spend more time engaging with brand activities and enhances enthusiasm, activation, and affection for the brand.

H1: Interactive Ease of Use has a significant influence on Consumer Brand Engagement (CBE).

Customization Interactivity and Consumer Brand Engagement

Customization interactivity allows consumers to tailor products, services, or content to their preferences, making experiences more relevant and engaging (Devkota et. al., 2021a). Personalized features and messages improve cognitive and emotional involvement, making brands appear more meaningful and attractive (Alam et. al., 2020; Islam et al., 2020). Customization reduces information overload and increases awareness of brand offerings, fostering intimacy and loyalty (Kaul et al., 2015). Users who perceive brands as adaptive to their personal needs are more likely to actively participate in brand interactions and social media discussions.

H2: Customization Interactivity has a significant influence on Consumer Brand Engagement (CBE).

Cognitive Information Transfer Interactivity (CITI) and Consumer Brand Engagement

Cognitive Information Transfer Interactivity (CITI) occurs when consumers share and receive brand-related information, reviews, and recommendations on social media platforms (More, 2023). Such interactions allow consumers to gather insights, reduce uncertainty, and make informed decisions (Daugherty & Hoffman, 2014). Engaging in information transfer strengthens trust, knowledge, and emotional connection with brands (Hossain et al., 2019). Actively participating in information sharing fosters stronger consumer–brand relationships and enhances cognitive, emotional, and behavioral engagement with brands.

H3: Cognitive Information Transfer Interactivity has a significant influence on Consumer Brand Engagement (CBE).

Cognitive Up-to-Date Information Interactivity (CII) and Consumer Brand Engagement

Cognitive Up-to-Date Information Interactivity (CII) refers to consumers' engagement with brands to access current news, updates, and trends on social media (Kim et al., 2020; Liu et al., 2021). Regular exposure to timely, relevant content encourages users to participate in brand discussions, follow updates, and share information with peers (Algharabat et. al., 2020). Trendy and updated content increases attention, knowledge, and brand awareness, which fosters positive perceptions and strengthens engagement (Hazzam, 2021). Frequent interactions with such information cultivate cognitive involvement, emotional attachment, and active participation in brand activities.

H4: Cognitive Up-to-Date Information Interactivity has a significant influence on Consumer Brand Engagement (CBE).

Entertainment Interactivity (EI) and Consumer Brand Engagement

Entertainment Interactivity (EI) measures the fun and enjoyment consumers experience while engaging with brand content on social media (Devkota et. al., 2021a). Entertaining content, including videos, games, and multimedia, enhances user engagement by making interactions enjoyable and emotionally stimulating (Liu et al., 2021). Fun and amusing experiences encourage consumers to spend more time with brand content, strengthen emotional bonds, and foster positive attitudes toward the brand (Islam et al., 2020). This leads to increased cognitive and affective engagement, enhancing loyalty and participation in brand-related activities.

H5: Entertainment Interactivity has a significant influence on Consumer Brand Engagement (CBE).

Consumer Brand Engagement (CBE) and Value Co-creation

Value co-creation occurs when consumers actively contribute ideas, feedback, and experiences that enhance brand offerings (Rather et al., 2021). Consumer Brand Engagement strengthens involvement, emotional connection, and willingness to participate in co-creation activities (Cheung et al., 2021). Engaged consumers feel motivated to collaborate with brands, share insights, and suggest improvements, resulting in higher perceived brand value and better customer experiences (Bazi et al., 2020). Strong engagement thus directly facilitates consumer participation in co-creating meaningful brand outcomes.

H6: Consumer Brand Engagement has a significant influence on Value Co-creation.

Consumer Brand Engagement (CBE) and Brand Loyalty

Brand loyalty reflects consumers' repeated preference for a brand and their commitment to future purchases (Li et al., 2020). Engaged consumers invest cognitive, emotional, and behavioral resources into brand interactions, forming attachment and trust (Rather et al., 2021). Social media interactivity strengthens positive experiences, emotional connections, and awareness, motivating consumers to continue using the brand and recommend it to others (Nyadzayo et al., 2020; Cheung et al., 2021). Hence, higher engagement translates into greater loyalty and long-term brand commitment.

H7: Consumer Brand Engagement has a significant influence on Brand Loyalty

Table 1: Variable Table and Its Definitions

Construct	Indicators	Variables	Details	Citations
Interactivity Ease of Use (IEOU)	IEOU1 *	Easy to use	Easy to use brand X social media brand page	Cheung et al., (2021)
	IEOU2	Use it anytime, anywhere	Convenient to use brand X social media brand page	
	IEOU3	Two-way interaction	Possibility of two-way interactions	
	IEOU4*	Be clear and understandable	Intention to use social media brand page	
	IEOU 5*	Easy to share opinions	accessibility using brand X social media brand page	

Customization Interactivity (CI)	CI1*	Customized information	Possibility to Search for customized information on social media brand page	Zhang et. al. (2021)
	CI2	Live feed information	Provide live feed information that users will be interested in social media brand page	
	CI3	Customized services	Provide customized services in brand social media page	
	CI4	Customized recommendation	Receives information and content as per users interest	
	CI5	Assistance	Gives directions to users so that users can easily get information that they need in brand page	
Entertainment Interactivity (EI)	EI1	Interesting content	Content found in brand X social media page is interesting	Devkota et. al., (2021a)
	EI2	Exciting	Content posted in brand X social media page is exciting	
	EI3	Enjoyable	Enjoyable use brand X social media page.	
	EI4	Fun	Content posted in brand X social media is fun.	
	EI5*	Fascinating	Easy to Kill time when using brand X Social media page	
Cognitive up to date information interactivity (CII)	CII1*	Up to date information	Contents found in brand X social media page are up to date	Ashley & Tuten, (2015
	CII2	Trendy	Contents in brand X page are trendy	
	CII3	Relevant	Contents are relevant in Brand X social media page	
	CII4*	Happening	Contents posted in Brand X are happening	
	CII5	Current	Content posted are of current context	
Cognitive information transfer interactivity (CITI)	CITI1*	Share	Users like to share information related to brands, services or products from Brand X social media page to others (Friends, families)	Islam et al. (2020)
	CITI2	Upload content	Users like to upload content on their personal social media page from brand X social media page	
	CITI3	Discuss	Users like to discuss their opinions to their friends on brand products and services that is acquired from brand X social media page	
	CITI4	Recommend	Users recommend the brand X social media page to others	
	CITI5	Feedback	Give feedback on using the brand social media page	

CBE-Cognitive Processing (CBE-CP)	CBE-CP1	Using brand	Using this brand gets the users thinking about brand X	Islam et al. (2020)
	CBE-CP2	Think about brand	Think about brand X a lot when using it	
	CBE-CP3	Stimulation to learn	Using brand X stimulates interest to learn about brand X	
CBE-Affection (CBE-A)	CBE-A-1	Positive feeling	Users feel positive using the brand X	
	CBE-A2	Happiness feeling	Users feel happy suing the brand X	
	CBE-A3	Good feeling	Using Brand X gives good feeling to users	
	CBE-A4	Proud using it	Using brand X product or services gives user the feeling of being proud.	
CBE-Activation (CBE-AT)	CBE-AT1	Spend time	Spend lot of time while using brand X	
	CBE-AT2	Preference	User use brand X the most	
Co-Creation (CC)	CC1	Suggest	User usually suggest brand X to improve its product and services	Cheung et al., (2021)
	CC2*	Express needs	User express their personal needs to brand X	
	CC3*	Find solution together	Users let know about the problem with brand X	
	CC4	Actively involved	Users are actively involved when brand X develops new products and services	
	CC5	Encourages consumers	Brand X encourages customers to create solutions together.	
Brand Loyalty (BL)	BL1*	Maintain relationship	Maintain relationship with brand X	Cheung et al., (2021)
	BL2	Say positive things	Users say positive things about brand X	
	BL3*	Repeat use	If user gets opportunity to do it over again user prefer brand X	
	BL4	Preference	If users prefer same brand when other brands are available too.	
	BL5	Choice	If brand x is the preferred choice.	

* = *Items deleted during Data analysis*

3. Research Methods

The study was conducted in Kathmandu Valley, comprising Kathmandu, Lalitpur, and Bhaktapur, with a population exceeding 2.5 million (Datareportal, 2022). The valley has high social media penetration, with over 13 million users in Nepal (Datareportal, 2022), and around 4 million digital wallet users (NRB, 2021). This makes it an ideal area to study social media interactivity and consumer brand engagement. The research focuses on users of digital wallet services, examining how social media interactions influence engagement, value co-creation, and loyalty in a culturally diverse and digitally active population.

Since the exact number of digital wallet users active on social media in Kathmandu Valley is unknown, a non-probability sampling approach was adopted, specifically convenience sampling, where respondents were selected based on accessibility and active use of digital wallet services on social media (Shrestha et al., 2023). The sample size was determined using Cochran's formula (Woolson et al., 1986): $n = Z^2pq/e^2$ (Aalam

et al., 2025), where n is the required sample size, z = 1.96 at 95% confidence level, p = 0.5 is the estimated proportion of users, q = 1−p = 0.5, and e=0.05 is the margin of error. Substituting the values into the formula results in a sample size of 384. Adding 5% for non-response results in a final sample size of 403.

The tool that was used to collect data for this study is structured questionnaire. The questionnaire was created using the KOBO Toolbox platform. A pilot test was conducted before the full survey was rolled out, in which 15 respondents were asked to review the survey, considering factors like clarity, organization and suitability of the questions (Singh et al., 2024). The pre-test provided reasonable feedback, which was addressed properly, and the questionnaire was adjusted to become more understandable and effective.

The data collected for this research were examined using both descriptive and inferential statistical methods. Inferential analysis was conducted to test the proposed hypotheses and to assess the significance and strength of the relationships among the key study variables. Microsoft Excel was employed for the initial data entry, coding, and basic descriptive analysis to maintain organization and accuracy. Subsequently, SmartPLS 4.0 was utilized for advanced statistical procedures, including testing the reliability and validity of measurement models and examining causal relationships among independent, dependent, and mediating variables through structural modeling.

4. Results

Socio Demographic Analysis

Table 2: Socio Demographic Result

Title	Category	Number	Percentage %
Gender	Female	202	50.12
	Male	200	49.63
	Others	1	0.25
Age (In years)	Below 18	2	0.5
	18-24	64	15.88
	25-34	174	43.18
	35-44	130	32.26
	45-54	30	7.44
	55-64	2	0.5
	65 and above	3	0.74
Location	Kathmandu	230	57.07
	Lalitpur	114	28.29
	Bhaktapur	59	14.64
Education Level	Below SLC or Equivalent	17	4.22
	Up to Intermediate/+2	71	17.62
	Up to Bachelors	234	58.06
	Masters and above	81	20.01
Employment Status	Part-Time employed	29	7.2
	Full time employed	193	47.89
	Contract	22	5.64
	Freelancer	50	12.41
	Currently unemployed	28	6.95
	Retired/Pensioner	5	1.24
	Housewife/House husband	15	3.72
	Student	61	15.14

Average family monthly Income	Below 20000	23	5.17
	20,000-50,000	172	42.68
	50,000 – 100,000	190	47.15
	Above 100,000	18	4.47

The socio-demographic profile of the 403 respondents indicates that the majority were younger to middle-aged adults, with 43.18% (174) in the 25–34 age group, followed by 130 respondents in the 35–44 age group. Respondents aged 18–24 accounted for 16.13% (64), while very few were aged 55–64 (2) or 65 and above (3), reflecting a sample dominated by working-age individuals, consistent with Ismlam et. al. (2021). Educationally, most respondents had attained tertiary-level education, with 235 holding a degree, whereas 17 had education below the SLC or equivalent. Employment data shows that 47.64% (193) were full-time employed, while only 5.64% (5) were retired or pensioners, suggesting an active workforce representation. Family monthly income predominantly fell between NPR 20,000–50,000, with a small proportion (4.47%, 18 respondents) earning above NPR 100,000, indicating most respondents belong to lower-to-middle income brackets. Importantly, all respondents were aware of social media as a business marketing platform, with 88.83% recognizing its significance in promoting products and services. Overall, the findings highlight that social media is an integral part of daily life, with respondents actively engaging online and demonstrating high awareness of social media marketing, corroborating studies by Alam et. al. (2021) and Saud et al. (2020).

Social Media and Digital Wallet

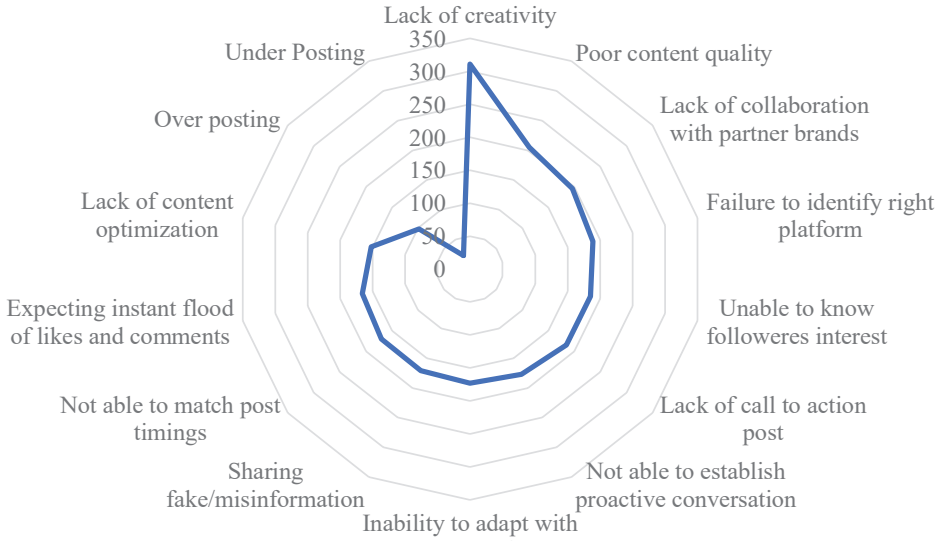
The study revealed that all 403 respondents were active social media users. Facebook was the most widely used platform (98.76%), followed by YouTube (86.85%), Viber (85.61%), Instagram (83.37%), and TikTok (80.15%), while LinkedIn, Snapchat, Twitter, and Telegram were less popular, with usage ranging from 14%–33.5%. A substantial portion of respondents (41.69%) reported spending more than seven hours per day on social media, and 69.98% had more than six years of experience using these platforms, indicating that social media is deeply integrated into their daily lives. These findings align with previous research showing high engagement levels among emerging adults (Alhabash et al., 2017). Importantly, the majority of respondents (88.83%) recognized social media as an effective tool for business promotion, reflecting growing consumer awareness. This highlights that businesses leveraging social media have significant opportunities to engage and influence their target audiences effectively.

The rise of cashless payments has boosted the popularity of digital wallets in Kathmandu Valley. Among 403 respondents, e-Sewa was the most used service (68.49%), followed by Khalti (22.3%), IME Pay (4.7%), and Prabhu Pay (3.47%). Usage frequency shows that most users engage with their preferred wallet occasionally or weekly, though 41.69% use it regularly. The majority (92.31%) were aware of their wallet's social media presence, primarily on Facebook (53.1%) and Instagram (26.8%), with over half (51.61%) actively engaging via likes, shares, or comments. These results highlight that social media is vital for marketing, user engagement, and brand promotion among digital wallet providers in Nepal.

Challenges and Managerial Solutions

The study found that 81.39% of respondents believe businesses in Nepal are not effectively using social media, with only 10.92% reporting full utilization. As shown in Figure 2, major challenges include lack of creativity (77.7%), poor content quality, limited collaboration with partners or influencers, incorrect platform selection, and failure to establish proactive conversations. Respondents also highlighted that responsibility lies with multiple stakeholders: marketing teams (79.4%), management (78.16%), policymakers (73.95%), and boards (73.45%). These issues indicate that businesses struggle to engage audiences meaningfully, reducing social media interactivity and consumer brand engagement, and highlighting the need for improved strategic focus.

Figure 2: Challenges Faced by Respondents



Respondents suggested practical solutions to improve engagement, with 72.7% recommending more creative content and 45–44% advocating collaboration with partner brands and encouraging consumer participation. Other strategies included improving content quality, aligning posts with audience interests, optimizing content, adapting to trends, initiating proactive conversations, and focusing on value over volume. Additionally, respondents emphasized sharing customer experiences, using call-to-action posts, posting entertaining and updated content, and investing in digital marketing. Implementing these solutions can enhance social media interactivity, strengthen consumer engagement, foster brand loyalty, and create value co-creation opportunities for digital wallet service providers in Nepal.

Inferential Statistics

Common Method Bias

Common method bias is typically a factor in PLS-SEM that arises due to the collection of the data and not the real relationships between the variables within the model. A variance inflation factor (VIF) is one of the ways to identify this problem. VIF values are too high when the variables are too related, so it is an indicator of a problem. According to Hair et al. (2017), a simple check of this bias is to use VIF. Having a VIF of over 3.3 could reflect collinearity or common method error (Mia et al., 2022). However, when all VIF values are equal to or less than 3.3, it indicates that the model is unlikely to be affected by multicollinearity, as demonstrated in Table 2 of this study.

Measurement Model Analysis

The measurement model, also known as the outer model, constitutes the first stage of a PLS analysis, illustrating how observed variables relate to underlying latent constructs (Hair et al., 2020). This stage evaluates both validity and reliability, where validity determines whether a tool accurately measures the intended construct, and reliability assesses whether results are consistent across repeated measurements. In this study, the measurement model was examined using three criteria: internal consistency, convergent validity, and discriminant validity, following Hajjar (2018). Internal consistency was assessed using Cronbach's Alpha (CA) and Composite Reliability (CR). A CA value greater than 0.6 indicates acceptable internal consistency (Mia et al., 2022), while CR values between 0.6–0.7 are acceptable and 0.7–0.9 are considered satisfactory to good, with values above 0.95 indicating potential redundancy (Hajjar, 2018; Tiwari et al., 2025). As shown in Table 2, all constructs satisfied the CA and CR thresholds, confirming that the measurement model demonstrates strong internal reliability and consistency.

Table 2: Factor Loadings, AVE, Composite Reliability, Cronbach's Alpha, VIF

Constructs	Item Code	Factor Loadings	AVE	CR	CA	VIF
Interactive Ease of Use	IEOU2	0.995	0.658	0.782	0.657	1.097
	IEOU3	0.571				
Customization Interactivity	CI2	0.72	0.579	0.844	0.756	1.062
	CI3	0.867				
	CI4	0.828				
	CI5	0.602				
Entertainment Interactivity	EI1	0.734	0.533	0.82	0.709	1.053
	EI2	0.743				
	EI3	0.754				
	EI4	0.688				
Cognitive Up-to-Date Information	CII2	0.842	0.542	0.778	0.599	1.046
	CII3	0.709				
	CII5	0.644				
Cognitive Information Transfer Interactivity	CITI2	0.529	0.561	0.832	0.739	1.178
	CITI3	0.713				
	CITI4	0.867				
	CITI5	0.84				
Consumer Brand Engagement	CP1	0.676	0.516	0.762	0.5666	1.101
	CP2	0.737				
	CP3	0.74				
Consumer Brand Engagement-Affection	A1	0.73	0.619	0.83	0.5666	1.174
	A2	0.814				
	A3	0.814				
Consumer Brand Engagement - Activation	AT1	0.769	0.656	0.851	0.5666	1.243
	AT2	0.862				
	AT3	0.795				
Co-Creation	CC1	0.701	0.567	0.796	0.619	1.16
	CC4	0.817				
	CC5	0.737				
Brand Loyalty	BL2	0.58	0.557	0.786	0.589	1.263
	BL4	0.771				
	BL5	0.86				

In this study, factor loadings were used to evaluate convergent validity, which reflects the strength of the relationship between a latent variable (the underlying construct) and its observed indicators in path analysis (Mia et al., 2022). According to Campbell and Fiske, items should have loadings above 0.7, with items below 0.7 reconsidered and those below 0.4 removed from the model (Chomphucome, 2018). Hair et al. (2017) also suggest that acceptable loadings should explain at least 50% of the variance,

corresponding to values of 0.708 or higher. Convergent validity is further assessed using the Average Variance Extracted (AVE), calculated by averaging the squared loadings of all indicators. An AVE of 0.5 or higher indicates that the construct explains at least half of the variance in its indicators, demonstrating acceptable convergent validity (Hair et al., 2020). As shown in Table 2, all constructs in this study meet these criteria, confirming the adequacy of convergent validity.

Discriminant validity assesses the extent to which constructs within a measurement model are conceptually and empirically distinct from one another. In this study, discriminant validity was evaluated using multiple approaches, including the Heterotrait-Monotrait (HTMT) ratio, Fornell-Larcker criterion, and cross-loadings (Hair et. al., 2017). HTMT values below 0.85 indicate strong discriminant validity, while values between 0.85 and 0.90 are considered acceptable but may suggest some overlap between constructs (Mia et. al., 2022). As shown in Table 3, most HTMT values fall below the 0.85 threshold, indicating that the constructs are generally distinct. The Fornell-Larcker criterion further supports discriminant validity, as presented in Table 4, where a construct demonstrates validity if the square root of its AVE exceeds its correlations with other constructs (Hajjar, 2018). Cross-loadings were also examined, as shown in Table 5, where each measurement item exhibited its highest loading on the intended construct and lower loadings on other constructs. These results collectively confirm that the measurement model meets the criteria for discriminant validity.

Table 3: HTMT Ratio

	A	**AT**	**BL**	**CC**	**CI**	**CII**	**CITI**	**CP**	**EI**	**IEOU**
A										
AT	0.480									
BI	0.384	0.622								
CC	0.433	0.381	0.586							
CI	0.093	0.099	0.204	0.140						
CII	0.342	0.203	0.162	0.306	0.146					
CITI	0.345	0.335	0.301	0.343	0.113	0.305				
CP	0.441	0.403	0.413	0.629	0.092	0.422	0.456			
EI	0.255	0.225	0.318	0.399	0.123	0.276	0.341	0.493		
IEOU	0.094	0.113	0.135	0.158	0.293	0.091	0.093	0.195	0.115	

Table 4: Fornell-Larcker Criterion

	A	**AT**	**BL**	**CC**	**CI**	**CII**	**CITI**	**CP**	**EI**	**IEOU**
A	0.787									
AT	0.354	**0.810**								
BL	0.259	0.419	**0.746**							
CC	0.286	0.261	0.354	**0.753**						
CI	0.043	-0.060	-0.147	0.001	**0.761**					
CII	0.216	0.130	0.088	0.214	0.071	**0.737**				
CITI	0.256	0.270	0.197	0.262	0.050	0.221	**0.749**			
CP	0.294	0.261	0.232	0.376	-0.064	0.272	0.306	**0.718**		
EI	0.185	0.169	0.208	0.274	0.051	0.194	0.262	0.306	**0.730**	
IEOU	-0.076	-0.076	-0.093	-0.117	0.194	-0.063	-0.020	-0.119	0.008	**0.811**

Table 4: Cross-Loadings

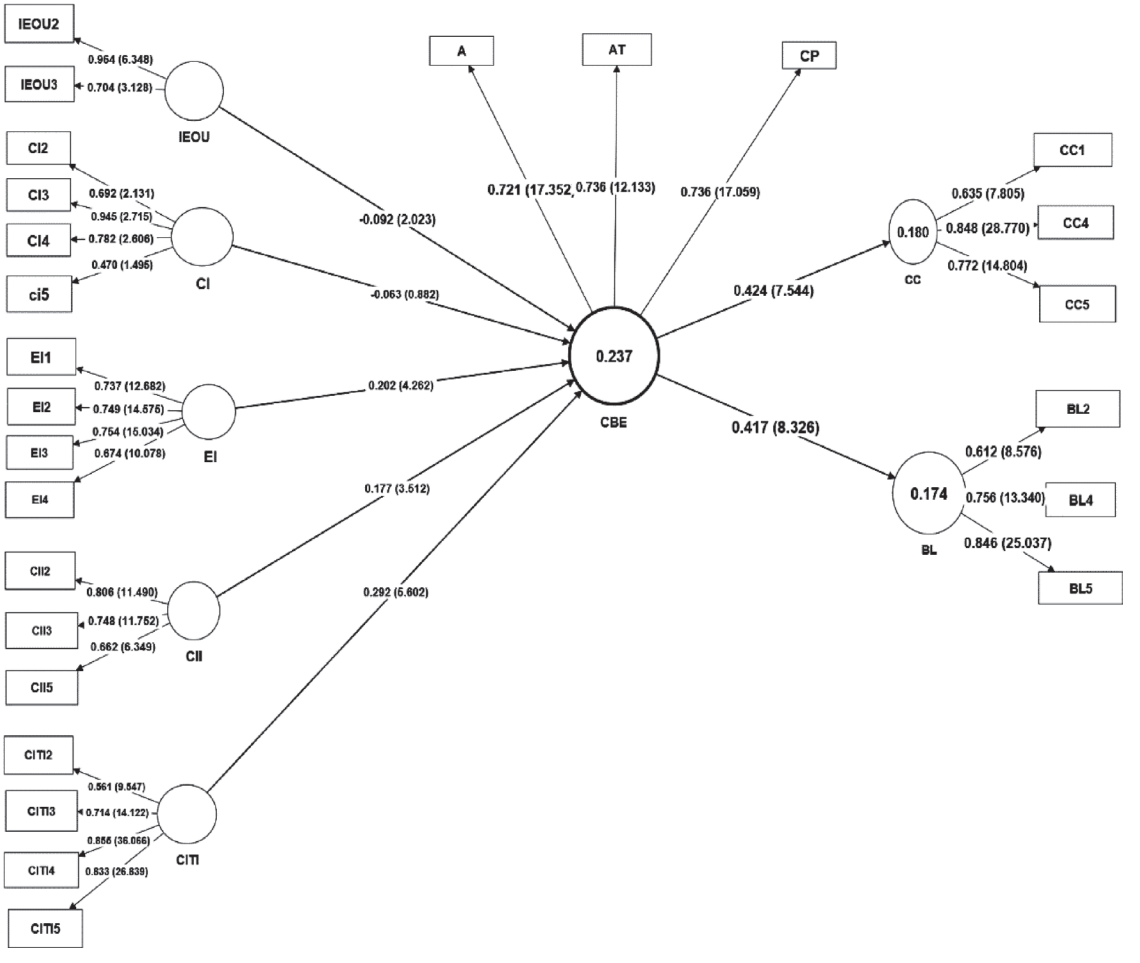
	A	AT	CP	BL	CC	CI	CII	CITI	EI	IEOU
A1	0.730	0.186	0.213	0.136	0.179	-0.015	0.195	0.200	0.108	-0.064
A2	0.814	0.301	0.152	0.188	0.162	0.062	0.179	0.190	0.145	-0.075
A3	0.814	0.330	0.305	0.265	0.307	0.048	0.148	0.213	0.175	-0.047
AT1	0.357	0.769	0.235	0.334	0.260	0.008	0.087	0.198	0.177	-0.063
AT2	0.247	0.862	0.223	0.356	0.181	-0.045	0.111	0.218	0.131	-0.052
AT3	0.253	0.795	0.173	0.325	0.189	-0.110	0.119	0.239	0.100	-0.070
CP1	0.107	0.109	0.676	0.108	0.278	-0.056	0.163	0.225	0.258	-0.080
CP2	0.167	0.170	0.737	0.181	0.206	-0.037	0.158	0.183	0.197	-0.110
CP3	0.335	0.268	0.740	0.205	0.312	-0.044	0.252	0.244	0.204	-0.072
BL2	0.187	0.235	0.212	0.580	0.240	-0.058	0.103	0.166	0.215	-0.039
BL4	0.163	0.286	0.093	0.771	0.245	-0.101	0.071	0.119	0.057	-0.083
BL5	0.222	0.390	0.202	0.860	0.300	-0.154	0.038	0.155	0.182	-0.084
CC1	0.124	0.140	0.342	0.215	0.701	-0.052	0.211	0.266	0.237	-0.119
CC4	0.263	0.273	0.283	0.303	0.817	-0.013	0.169	0.159	0.209	-0.100
CC5	0.272	0.168	0.208	0.286	0.737	0.086	0.085	0.159	0.164	-0.031
CI2	0.040	-0.064	-0.019	-0.113	-0.027	0.720	0.027	-0.002	0.016	0.168
CI3	0.022	-0.070	-0.071	-0.115	-0.014	0.867	0.051	0.063	0.066	0.220
CI4	0.035	-0.017	-0.072	-0.142	-0.015	0.828	0.041	0.018	-0.005	0.138
CI5	0.043	-0.030	-0.015	-0.062	0.107	0.602	0.139	0.103	0.119	0.016
CII2	0.170	0.090	0.294	0.069	0.248	0.028	0.842	0.197	0.189	-0.088
CII3	0.156	0.121	0.135	0.007	0.093	0.074	0.709	0.163	0.078	-0.019
CII5	0.158	0.090	0.119	0.123	0.076	0.078	0.644	0.116	0.141	-0.004
CITI2	0.182	0.108	0.191	0.006	0.118	0.068	0.065	0.529	0.064	-0.021
CITI3	0.119	0.118	0.135	0.136	0.074	0.009	0.153	0.713	0.186	-0.063
CITI4	0.266	0.207	0.270	0.195	0.267	0.062	0.224	0.867	0.291	-0.050
CITI5	0.176	0.307	0.278	0.195	0.245	0.015	0.183	0.840	0.196	0.044
EI1	0.128	0.168	0.258	0.126	0.265	0.075	0.167	0.179	0.734	-0.013
EI2	0.103	0.098	0.249	0.145	0.156	0.067	0.107	0.190	0.743	0.038
EI3	0.175	0.145	0.183	0.181	0.189	0.002	0.168	0.186	0.754	0.009
EI4	0.134	0.066	0.199	0.159	0.174	-0.002	0.117	0.215	0.688	-0.006
IEOU2	-0.083	-0.074	-0.120	-0.104	-0.124	0.183	-0.061	-0.021	0.001	0.995
IEOU3	0.019	-0.061	-0.057	0.045	-0.001	0.201	-0.053	-0.002	0.062	0.571

Structural Model Analysis

In PLS-SEM, it is recommended to test multivariate normality when conducting structural equation modeling. In this study, multivariate skewness and kurtosis were evaluated following Hair et al. (2017) and Cain et al. (2017). The results indicate that the data do not meet the criteria for multivariate normality, with Mardia's multivariate skewness ($\beta = 368.4542$, $p = 0$) and kurtosis ($\beta = 2253.5469$, $p = 0$) confirming

non-normality. Consequently, the structural model was analyzed using a bootstrapping approach, which generates random subsamples with replacement from the original dataset to estimate path coefficients, standard errors, t-values, and p-values (Hair et al., 2020). A 10,000-sample resampling procedure was applied for robust estimation. Figure 3 illustrates the path coefficients and R^2 values, which reflect the model's predictive power, the proportion of variance in endogenous constructs explained by exogenous variables (Hair et al., 2017). The model explains 23.4% of the variance in consumer brand engagement (CBE), 18% in value co-creation, and 17% in brand loyalty. While these R^2 values are moderate, they exceed the minimum threshold of 0.10 suggested by Hair et al. (2020), indicating that the model adequately captures the variance in the endogenous constructs. These results align with findings from previous management studies.

Figure 3: Structural Model



To test the study hypotheses, the structural model (inner model) was evaluated using t-values, p-values, and 95% confidence intervals for all path coefficients, following the guidelines of Hair et al. (2017). The significance level was set at 0.05. The results indicate that six out of the seven hypotheses were supported, while H2 (Customization Interactivity - CBE) was not (Table 5). Specifically, Interactive Ease of Use (IEOU) demonstrated a significant effect on CBE (β = -0.092, t = 2.023, p = 0.043), as did Entertainment Interactivity (EI) (β = 0.202, t = 4.262, p = 0), Cognitive Information Transfer Interactivity (CITI) (β = 0.292, t = 5.602, p = 0), and Cognitive Up-to-Date Information Interactivity (CII) (β = 0.177, t = 3.512, p = 0), confirming their role as significant antecedents of CBE. In contrast, Customization Interactivity

(CI) had a negative and non-significant effect (β = -0.063, t = 0.882, p = 0.378), failing to support H2. Regarding the higher-order latent construct, CBE significantly influenced both Value Co-Creation (β = 0.424, t = 7.544, p = 0) and Brand Loyalty (β = 0.417, t = 8.326, p = 0), supporting H6 and H7. These findings confirm that the key social media interactivity dimensions, except customization, positively drive consumer brand engagement, which in turn enhances co-creation behavior and brand loyalty, highlighting the critical mediating role of CBE in digital wallet brand interactions.

Table 5: Hypothesis Testing

Hypothesis	Path	Beta Value	SD	t-Value	p-value	95% CI		Result
						LL	UL	
H1	IEOU -> CBE	-0.092	0.045	2.023	0.043	-0.164	0.047	Supported
H2	CI -> CBE	-0.063	0.072	0.882	0.378	-0.152	0.128	Rejected
H3	CITI -> CBE	0.292	0.052	5.602	0.000	0.187	0.393	Supported
H4	EI -> CBE	0.202	0.047	4.262	0.000	0.108	0.293	Supported
H5	CII -> CBE	0.177	0.05	3.512	0.000	0.073	0.269	Supported
H6	CBE -> CC	0.424	0.056	7.544	0.000	0.305	0.526	Supported
H7	CBE -> BL	0.417	0.05	8.326	0.000	0.312	0.506	Supported

5. Discussion

The study examined the impact of social media brand interactivity on consumer brand engagement (CBE) among digital wallet users in Kathmandu Valley. The analysis considered five interactivity factors, Interactive Ease of Use (IEOU), Customization Interactivity (CI), Entertainment Interactivity (EI), Cognitive Information Transfer Interactivity (CITI), and Cognitive Up-to-Date Information Interactivity (CII). Results show that four of these factors, IEOU, EI, CITI, and CII, significantly influence CBE, supporting hypotheses H1, H3, H4, and H5. Among them, CITI had the strongest effect (β = 0.292, t = 5.602, p = 0), highlighting the importance of peer reviews, electronic word-of-mouth, and customer referrals. Consumers who actively share opinions and experiences with other users develop deeper engagement and a stronger sense of community, enhancing their connection with the brand, consistent with prior studies (France et al., 2016; Alam et al., 2021).

Interactive Ease of Use (IEOU) was also significant (β = -0.092, t = 2.023, p = 0.043), suggesting that when social media platforms are easy to navigate, users encounter fewer barriers and are more likely to interact with brands. Entertainment Interactivity (EI) positively influenced CBE (β = 0.202, t = 4.262, p = 0), indicating that engaging and enjoyable content motivates users to participate, share, and strengthen their emotional connection with the brand (Cheung et al., 2020). Cognitive Up-to-Date Information Interactivity (CII) also showed a strong positive relationship with CBE (β = 0.177, t = 7.544, p = 0), reinforcing the value of providing timely, reliable, and relevant brand information for enhancing engagement, in line with prior research (Devkota et. al., 2021b; Hollebeek et al., 2014).

Consumer brand engagement, conceptualized as a second-order reflective-reflective construct encompassing cognitive, emotional, and behavioral dimensions, was found to positively influence both value co-creation (β = 0.424, t = 7.544, p = 0) and brand loyalty (β = 0.417, t = 8.326, p = 0), supporting hypotheses H6 and H7. These results indicate that active engagement through social media interactions encourages users to participate in value co-creation activities and strengthens loyalty to the brand (Chen, 2017; Rather et al., 2019; Cheung et al., 2020). The findings highlight the critical role of social media interactivity in shaping consumer-brand relationships and in promoting meaningful engagement behaviors that extend beyond transactional interactions.

6. Conclusion

This study explored the impact of social media interactivity on consumer brand engagement and its subsequent effects on value co-creation and brand loyalty in the context of digital wallet services in Kathmandu Valley. The findings reveal that four interactivity elements, Interactive Ease of Use, Entertainment Interactivity, Cognitive Information Transfer Interactivity, and Cognitive Up-to-Date Information Interactivity, significantly influence consumer brand engagement, while Customization Interactivity had no notable effect. The results highlight that active and seamless engagement on social media facilitates psychological attachment, knowledge sharing, and participatory behavior, which in turn strengthens brand value co-creation and customer loyalty. Consumer brand engagement was found to serve as a critical mechanism through which consumers co-create brand value, demonstrating that interactive, informative, and entertaining content encourages higher engagement levels. These insights underscore the importance of social media as a strategic platform for service brands in developing markets like Nepal, where digital marketing strategies are still evolving. By fostering interactive experiences and encouraging customer participation, brands can build stronger, long-term relationships with their audience, enhance loyalty, and support business growth.

The study provides both theoretical and practical implications. Theoretically, it extends Service-Dominant Logic by examining multiple social media interactivity elements and their influence on consumer brand engagement, value co-creation, and brand loyalty, offering insights into consumer behavioral responses in a digital context. Practically, digital wallet brands in Nepal can leverage these findings to design interactive, informative, and entertaining social media content that encourages engagement, sharing, and co-creation. For future research, longitudinal studies are recommended to validate causal relationships and improve generalizability. Expanding the study to other industries and exploring additional antecedents using frameworks like Social Exchange Theory, S-O-R, or Uses and Gratifications Theory could provide a broader understanding of CBE and its drivers.

References

Aalam, M. P., Siddique, M. R., & Kunwar, R. (2025). Impact of digital complaint management system on banking customer satisfaction: Evidence from Kathmandu valley, Nepal. *Economic Review of Nepal*, *8*(2), 93-107.

Alam, M. M., Awawdeh, A. E., & Muhamad, A. I. B. (2021). Using e-wallet for business process development: Challenges and prospects in Malaysia. *Business Process Management Journal*, *27*(4), 1142-1162. https://doi.org/10.1108/BPMJ-11-2020-0528

Algharabat, R., Rana, N. P., Alalwan, A. A., Baabdullah, A., & Gupta, A. (2020). Investigating the antecedents of customer brand engagement and consumer-based brand equity in social media. *Journal of Retailing and Consumer Services*, *53*, 101767. https://doi.org/10.1016/j.jretconser.2019.01.016

Aral, S., Dellarocas, C., & Godes, D. (2013). Introduction to the special issue—social media and business transformation: a framework for research. *Information systems research*, *24*(1), 3-13. https://doi.org/10.1287/isre.1120.0470

Ashley, C., & Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & marketing*, *32*(1), 15-27. https://doi.org/10.1002/mar.20761

Banyte, J., & Dovaliene, A. (2014). Relations between customer engagement into value creation and customer loyalty. *Procedia-Social and Behavioral Sciences*, *156*, 484-489. https://doi.org/10.1016/j.sbspro.2014.11.226

Bazi, S., Hajli, A., Hajli, N., Shanmugam, M., & Lin, X. (2020). Winning engaged consumers: The rules of brand engagement and intention of co-creation in social commerce. *Information Technology & People, 33*(2), 456-476. https://doi.org/10.1108/ITP-09-2018-0415

Cain, M. K., Zhang, Z., & Yuan, K. H. (2017). Univariate and multivariate skewness and kurtosis for measuring nonnormality: Prevalence, influence and estimation. *Behavior research methods*, *49*, 1716-1735. https://link.springer.com/article/10.3758/s13428-016-0814-1

Cao, D., Meadows, M., Wong, D., & Xia, S. (2021). Understanding consumers' social media engagement behaviour: An examination of the moderation effect of social media context. *Journal of Business Research*, *122*, 835-846. https://doi.org/10.1016/j.jbusres.2020.06.025

Chen, Y. R. R. (2017). Perceived values of branded mobile media, consumer engagement, business-consumer relationship quality and purchase intention: A study of WeChat in China. *Public Relations Review*, *43*(5), 945-954. https://doi.org/10.1016/j.pubrev.2017.07.005

Cheung, M. L., Pires, G., & Rosenberger, P. J. (2020). The influence of perceived social media marketing elements on consumer–brand engagement and brand knowledge. *Asia Pacific Journal of Marketing and Logistics*. https://doi.org/10.1108/APJML-04-2019-0262

Cheung, M. L., Pires, G. D., Rosenberger, P. J., Leung, W. K., & Sharipudin, M. N. S. (2021). The role of consumer-consumer interaction and consumer-brand interaction in driving consumer-brand engagement and behavioral intentions. *Journal of retailing and consumer services*, *61*, 102574. https://doi.org/10.1016/j.jretconser.2021.102574

Datareportal. (2022, Feburary 15). Digital 2022 : Nepal. Retrieved from Datareportal: https://datareportal.com/reports/digital-2022-nepal

Daugherty, T., & Hoffman, E. (2014). eWOM and the importance of capturing consumer attention within social media. *Journal of Marketing Communications*, *20*(1-2), 82-102. https://doi.org/10.1080/13527266.2013.797764

Devkota, N., Bijukshe, A., Pokhrel, L., Paudel, U. R., & Parajuli, S. (2021a). Factors influencing attitude toward online advertising in Kathmandu valley. *PYC Nepal Journal of Management*, *14*(1), 17-30. https://doi.org/10.3126/pycnjm.v14i1.41020

Devkota, N., Budhathoki, A., Paudel, U. R., Adhikari, D. B., Bhandari, U., & Parajuli, S. (2021b). Online trading effectiveness in Nepal share market: Investors awareness, challenges and managerial solution. *Asian Journal of Economics, Business and Accounting*, *21*(5), 90-98. https://doi.org/10.9734/ajeba/2021/v21i530385

Dubbelink, S. I., Herrando, C., & Constantinides, E. (2021). Social media marketing as a branding strategy in extraordinary times: Lessons from the COVID-19 pandemic. *Sustainability*, *13*(18), 10310. https://doi.org/10.3390/su131810310

France, C., Merrilees, B., & Miller, D. (2016). An integrated model of customer-brand engagement: Drivers and consequences. *Journal of Brand Management*, *23*, 119-136. https://link.springer.com/article/10.1057/bm.2016.4

Furr, N., Ozcan, P., & Eisenhardt, K. M. (2022). What is digital transformation? Core tensions facing established companies on the global stage. *Global Strategy Journal*, *12*(4), 595-618. https://doi.org/10.1002/gsj.1442

Gómez, M., Lopez, C., & Molina, A. (2019). An integrated model of social media brand engagement. *Computers in Human Behavior*, *96*, 196-206. https://doi.org/10.1016/j.chb.2019.01.026

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, *109*, 101-110. https://doi.org/10.1016/j.jbusres.2019.11.069

Hair, J. F., Babin, B. J., & Krey, N. (2017). Covariance-Based Structural Equation Modeling in the Journal of Advertising: Review and Recommendations. *Journal of Advertising*, *46*(1), 163–177. https://doi.org/10.1080/00913367.2017.1281777

Hajjar, S. T. (2018). Statistical analysis: Internal-consistency reliability and construct validity. *International Journal of Quantitative and Qualitative Research Methods, 6(1)*, 27-38. https://d1wqtxts1xzle7.cloudfront.net/88115056/Statistical-Analysis-Internal-Consistency-Reliability-and-Construct-Validity-libre.pdf?

Hazzam, J. (2022). The moderating role of age on social media marketing activities and customer brand engagement on Instagram social network. *Young Consumers*, *23*(2), 197-212. https://doi.org/10.1108/YC-03-2021-1296

Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of interactive marketing*, *28*(2), 149-165. https://doi.org/10.1016/j.intmar.2013.12.002

Hossain, M. A., Noor, R. M., Yau, K. L. A., Ahmedy, I., & Anjum, S. S. (2019). A survey on simultaneous wireless information and power transfer with cooperative relay and future challenges. *IEEE access*, *7*, 19166-19198. https://doi.org/10.1109/ACCESS.2019.2895645

Islam, J. U., Shahid, S., Rasool, A., Rahman, Z., Khan, I., & Rather, R. A. (2020). Impact of website attributes on customer engagement in banking: a solicitation of stimulus-organism-response theory. *International Journal of Bank Marketing*, *38*(6), 1279-1303. https://doi.org/10.1108/IJBM-12-2019-0460

Kallee, K. (2022). *The importance of trust, social support, and platform usage as drivers of social commerce for small businesses in South Africa* (Master's thesis, University of Pretoria (South Africa). https://www.proquest.com/openview/4ddff9ff3d6482c9f3e910ab091a616f/1?pq-origsite=gscholar&cbl=2026366&diss=y

Kaul, A., Chaudhri, V., Cherian, D., Freberg, K., Mishra, S., Kumar, R., ... & Carroll, C. E. (2015). Social media: The new mantra for managing reputation. *Vikalpa*, *40*(4), 455-491. https://doi.org/10.1177/0256090915618029

Khan, M. L. (2017). Social media engagement: What motivates user participation and consumption on YouTube?. *Computers in human behavior*, *66*, 236-247. https://doi.org/10.1016/j.chb.2016.09.024

Kim, B., Yoo, M., & Yang, W. (2020). Online engagement among restaurant customers: The importance of enhancing flow for social media users. *Journal of hospitality & tourism research*, *44*(2), 252-277. https://doi.org/10.1177/1096348019887202

Li, Y., Wang, H., Zeng, X., Yang, S., & Wei, J. (2020). Effects of interactivity on continuance intention of government microblogging services: an implication on mobile social media. *International Journal of Mobile Communications*, *18*(4), 420-442. 10.1504/IJMC.2020.108335

Lim, W. M., & Rasul, T. (2022). Customer engagement and social media: Revisiting the past to inform the future. *Journal of Business Research*, *148*, 325-342. https://doi.org/10.1016/j.jbusres.2022.04.068

Lusch, R. F., & Vargo, S. L. (2006). Service-dominant logic: reactions, reflections and refinements. *Marketing theory*, *6*(3), 281-288. https://doi.org/10.1177/1470593106066781

Machado, J. C., Vacas-de-Carvalho, L., Azar, S. L., André, A. R., & Dos Santos, B. P. (2019). Brand gender and consumer-based brand equity on Facebook: The mediating role of consumer-brand engagement and brand love. *Journal of Business Research*, *96*, 376-385. https://doi.org/10.1016/j.jbusres.2018.07.016

Mia, M. M., Zayed, N. M., Islam, K. M. A., Nitsenko, V., Matusevych, T., & Mordous, I. (2022). The Strategy of Factors Influencing Learning Satisfaction Explored by First and Second Order Structural Equation Modeling (SEM). *Inventions, 7(*3). https://doi.org/10.3390/inventions7030059

More, A. B. (2023). Implementing digital age experience marketing to make customer relations more sustainable. In *New Horizons for Industry 4.0 in modern business* (pp. 99-119). Cham: Springer International Publishing. https://link.springer.com/chapter/10.1007/978-3-031-20443-2_5

Nepal Rastra Bank (2020). Monetary Policy for 2020/21. Retrieved from: https://www.nrb.org.np/contents/uploads/2020/09/Monetary-Policy-2020_21-Full-Text-English-Version.pdf

Nyadzayo, M. W., Leckie, C., & Johnson, L. W. (2020). The impact of relational drivers on customer brand engagement and brand outcomes. *Journal of Brand Management*, *27*(5), 561-578. https://link.springer.com/article/10.1057/s41262-020-00198-3

Rather, R. A. (2021). Demystifying the effects of perceived risk and fear on customer engagement, co-creation and revisit intention during COVID-19: A protection motivation theory approach. *Journal of Destination Marketing & Management*, *20*, 100564. https://doi.org/10.1016/j.jdmm.2021.100564

Saud, M., Mashud, M. I., & Ida, R. (2020). Usage of social media during the pandemic: Seeking support and awareness about COVID-19 through social media platforms. *Journal of Public Affairs*, *20*(4), e2417. https://doi.org/10.1002/pa.2417

Shawky, S., Kubacki, K., Dietrich, T., & Weaven, S. (2019). Using social media to create engagement: A social marketing review. *Journal of Social Marketing. https://doi.org/10.1108/JSOCM-05-2018-0046*

Shrestha, G., Devkota, N., Dhakal, K., Mahato, S., Paudel, U. R., & Agrawal, S. (2023). Customer awareness of green purchase decisions regarding green products in Nepal. *Journal of the Academy of Business and Emerging Markets*, *3*(1), 27-40.

Singh, S., Lawaju, P., Paudel, U. R., & Poudel, D. K. (2024). Impact of Perceived Experiential Advertising on Consumer Behavior in Nepal: Evidence from SOR Theory. *Quest Journal of Management and Social Sciences*, *6*(2), 459-476.

Tiwari, D. R., Devkota, N., & Lawaju, P. (2025). Tourist satisfaction and sustainable homestay management: Insights from six rural communities in Western Nepal. *Quest Journal of Management and Social Sciences*, *7*(1), 182-200.

Vinerean, S. (2017). Importance of strategic social media marketing. In *Importance of strategic social media marketing: Vinerean, Simona*. https://savearchive.zbw.eu/handle/11159/1381

Wilden, R., Akaka, M. A., Karpen, I. O., & Hohberger, J. (2017). The evolution and prospects of service-dominant logic: an investigation of past, present, and future research. *Journal of service research*, *20*(4), 345-361. https://doi.org/10.1177/1094670517715121

Woolson, R. F., Bean, J. A., & Rojas, P. B. (1986). Sample size for case-control studies using Cochran's statistic. *Biometrics*, 927-932. https://doi.org/10.2307/2530706

Zhang, L., Zhao, H., & Cude, B. (2021). Luxury brands join hands: building interactive alliances on social media. *Journal of Research in Interactive Marketing*, *15*(4), 787-803. https://doi.org/10.1108/JRIM-02-2020-0041